



U.S. Department
of Transportation

**Pipeline and Hazardous
Materials Safety
Administration**

MAR 13 2019

1200 New Jersey Avenue, SE
Washington, DC 20590

John Sorrel Weakland
EH&S Compliance Coordinator
Cascade Asset Management, LLC
6701 Manufacturers Drive
Madison, WI 53704

Reference No. 18-0119

Dear Mr. Weakland:

This letter is in response to your August 20, 2018, letter requesting clarification of the Hazardous Materials Regulations (HMR; 49 CFR Parts 171-180) applicable to shipments of used nickel-cadmium and lithium ion batteries for recycling. You explain that your company disassembles electronic devices and ships the used nickel-cadmium and lithium ion batteries to recycling centers via highway transportation only. Additionally, you state that certain battery recycling companies have instructed you to use the Class 8 (Corrosive) label for packages of spent dry nickel-cadmium batteries and the Class 9 (Miscellaneous) label for packages of used lithium ion batteries. You provide photographs of the requested package configurations.

Specifically, you ask several questions about the labeling and training requirements for these battery shipments. We have paraphrased and answered your questions as follows:

- Q1. You ask if shipments meeting the exceptions in § 172.102(c) Special Provision 130(d) for spent dry batteries and § 173.185(d) for used lithium ion batteries require hazard class labels.
- A1. Shipments of used or spent dry batteries meeting the conditions of § 172.102(c), Special Provision 130(d) are not subject to any other requirement of the HMR, to include labeling requirements. Special Provision 130(d) does not permit batteries having different chemistries, e.g. lithium ion and/or dry batteries with a marked rating of greater than 9-volts, to be combined with used or spent batteries in the same package.

Please note the description “UN3028, Batteries, dry, containing potassium hydroxide solid” is not appropriate for nickel-cadmium batteries. This entry should be used only to describe non-activated batteries that contain dry potassium hydroxide and that are intended to be activated prior to use by the addition of an appropriate amount of water to the individual cells. This proper shipping name does not apply to common household batteries, such as nickel-cadmium, which are most appropriately described as “Batteries, dry, sealed, n.o.s.”

Shipments of lithium cells or batteries transported by motor vehicle for purposes of recycling in accordance with § 173.185(d) are excepted from the testing and record keeping requirements of § 173.185(a) and the specification packaging requirements of § 173.185(b)(3) when packed in a strong outer packaging conforming to the requirements of §§ 173.24 and 173.24a. A lithium cell or battery shipment that meets the size, packaging, and hazard communication requirements in § 173.185(c)(1)–(3) is excepted from the requirements in Subparts C through H of Part 172, which includes labeling requirements. Such packages must display the lithium battery mark required by § 173.185(c)(3). A lithium cell or battery shipment that does not meet the requirements in § 173.185(c)(1)–(3) must be labeled with the appropriate hazard class and meet the requirements in Subparts C through H of Part 172.

- Q2. Provided the shipments in Question Q1 do not require hazard class labels, you ask if permissive labeling of Class 8 for nickel-cadmium batteries and Class 9 for lithium ion batteries would be permitted in accordance with Special Provision 130(d) and § 173.185(d).
- A2. You may permissively label the package so long as it contains the material and presents the hazard described. However, as noted in Answer A1, nickel-cadmium batteries are most appropriately described as “Batteries, dry, sealed, n.o.s.” and do not meet the definition of a Class 8 material. Therefore, it would be incorrect to use the Class 8 label for shipments of nickel-cadmium batteries.
- Q3. Provided the hazard class labels in Question Q2 are permitted but unnecessary, you ask if it is appropriate for a carrier to require the additional labels.
- A3. While the HMR do not prohibit permissive labeling of these shipments, this Office does not recommend partial use of either exception, as it can create confusion in the enforcement or emergency response community that may result in issuance of a ticket and frustration of your shipment.
- Q4. You ask if there are training requirements for staff who package used nickel-cadmium and lithium ion batteries that qualify for the exceptions in Special Provision 130(d) and § 173.185(d).

A4. Hazardous materials training is not required for staff packaging shipments that meet the exceptions in Special Provision 130(d) for spent dry batteries. Lithium cells or batteries that meet the size, packaging, and hazard communication requirements in paragraph (c)(1)–(3) and § 173.185(d) for used lithium ion batteries shipped for recycling are excepted from the training requirements in Subpart H. See Answer A1.

I hope this information is helpful. Please contact us if we can be of further assistance.

Sincerely,

A handwritten signature in black ink, appearing to read "T. Glenn Foster". The signature is fluid and cursive, with a long horizontal stroke extending to the right.

T. Glenn Foster
Chief, Regulatory Review and Reinvention
Standards and Rulemaking Division

August 20, 2018

Mr. Shane Kelley
Director, Standards and Rulemaking Division
U.S. DOT/PHMSA (PHH-10)
1200 New Jersey Avenue, SE East Building, 2nd Floor
Washington, DC 20590

Our company is seeking clarification regarding the labeling of used batteries shipped for recycling and the training requirements for staff conducting the shipments. Specifically, our questions regard whether putting hazard class labels on containers nullifies the exemptions to Hazardous Materials Regulations that are provided for qualifying types of small batteries shipped for recycling, and, secondly, whether there are still legally mandated training requirements that would apply even if we are exempt from the requirements specified in 49 CFR 172.704.

As background, our company disassembles computers and other electronic devices for recycling. Nearly all batteries removed for recycling are of the size and type that qualify for the exceptions given in Special Provision 130(d) in 49 CFR 172.102(c)(1) for spent dry batteries, and in 173.185(d) for used lithium batteries. (All batteries are shipped to battery recyclers via highway transport only.) By my reading of those exceptions, the dry batteries require no special DOT labeling, while the lithium batteries require UN numbers and certain other labeling but not a class 9 lithium battery hazard label. However, some battery recycling companies have instructed us to put the class 9 label on all lithium battery containers and the class 8 label on all dry nickel-cadmium battery containers (classifying the latter as UN 3028). This left me uncertain about what is the proper way to label these materials.

I have attached photos of how we were requested to label packages of used lithium ion batteries and nickel-cadmium batteries from laptops, tablets, smart phones and other small electronics. By my reading of the exceptions, the class 9 label on the lithium ion package is unnecessary (the other two remain per 173.185(c)), and neither of the two labels on the NiCd container are required.

I was advised by someone in the industry that the hazard class labels were most definitely NOT required if the batteries were being shipped for recycling and, furthermore, that adding those labels was to commit to classifying the contents as fully regulated hazardous material, nullifying the exceptions and bringing into effect other parts of the HMR (notably training requirements for Hazmat employees) that we wished to avoid. However, a DOT regulator told me over the phone that this was not the case—that applying the hazard class labels did not of itself nullify the exceptions (although he agreed they were superfluous and recommended omitting them). Our attorneys concurred with that opinion, but they noted that there has

been no formal letter of interpretation published about the matter and they advised that we seek one from the PHMSA.

To summarize, our questions are the following:

Q1: Do the exceptions cited above for qualifying batteries shipped for recycling indeed remove the need for hazard class labels on the outer packaging?

Q2: If yes (Q1), does applying the hazard class label (class 9 for lithium and class 8 for nickel-cadmium) to the packaging nullify the exceptions?

Q3: If the hazard class labels are permitted but unnecessary (Q1=yes, Q2=no), is it appropriate for a transporter to require these extra labels?

One last question we have regards training requirements for staff who package used batteries that qualify for the exceptions above:

Q4: If the training requirements in 172.704 do not apply, are there other training-related requirements that apply instead?

We appreciate you providing a definitive answer to these questions, which will help clarify the matter for others in our industry.

John Sorrel Weakland
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Lithium ion batteries:



Nickel-cadmium batteries:

